

Easington Rural District

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year ended December 31, 1910.

WINGATE,
February, 1911.

Gentlemen,

I beg to submit to you my Annual Report of Vital Statistics and Sanitary Work for the year ended 31st December, 1910.

During the year, 889 deaths occurred of persons belonging to the district, of which 851 took place within the district and 38 without, and 2,132 births were registered.

The death rate of persons belonging to the district was 15·12 per thousand of population, against 19·43, the average for the previous thirty years. For the three previous decennial periods the average rates were respectively 20·20, 19·79 and 18·06.

The birth rate was 36·27 per thousand of population, against 38·88, the average for the previous thirty years. For the three previous decennial periods the average rates were respectively 40·93, 39·07 and 37·10.

The death rate is 41·66 per cent. of the birth rate, against 45·71, the average for the previous thirty years.

The number of deaths under five years of age was 458, being 51·05 per cent. of the total deaths, against 51·07, the average for the previous thirty years.

The number of deaths under one year to one thousand births was 153, against 169·5, the average for the previous twenty-nine years.

Twenty-nine deaths were of persons over eighty years of age, one ninety: fifteen males with an average of 83·0 years, and fourteen females with an average of 85·0 years.

252 deaths occurred in the first quarter, 196 in the second, 226 in the third and 215 in the fourth.

Fifty-one deaths were certified by coroner's inquest or order and four deaths were registered as uncertified, having been notified by unqualified practitioners.

Thirty-two deaths occurred at the Union Workhouse, twenty-three of persons belonging to the district and nine of persons not belonging to the district: five infants, four each of lung and heart ailments, one each of enteric fever and syphilis, two of cancer, three from accident and the rest from senility. Six were eighty years of age or upwards.

Two deaths occurred at the Infectious Diseases Hospital.

Six deaths were of bodies found drowned or killed by accident from outside the district, which, if deducted, would reduce the death rate to 15·02.

Of the thirty-eight deaths outside the district in public institutions, seven were at the County Asylum, Sedgefield, seventeen at Sunderland Infirmary, nine at Hartlepool Hospital, one at Sherburn Hospital, two at the County Hospital, Durham, and two at Throston Workhouse.

The deaths from the principal zymotic diseases were 1·14 per thousand of population, against 1·98, the average for the previous twenty-nine years. They were:—

	Under 5	Over 5	Total
Measles	8	2	10
Scarlet fever	2	2	4
Whooping cough	22	1	23
Diphtheria (including membranous croup)	13	8	21
Enteric fever	—	7	7
	—	—	—
	45	20	65

TYPHUS FEVER.—No case of this disease has appeared in the district since 1895.

SMALL-POX.—Since 1905 only one case has appeared in the district, in 1908.

MEASLES.—In the previous year the incidence of this disease on the district was marked. This year it appeared in the first quarter at Wheatley Hill, but lightly. In the second quarter it appeared at Shotton and Murton, also lightly, with one fatal case at each of these places. In the third quarter

it appeared at Hesleden and Seaham more extensively but without any fatal case. In the fourth quarter it appeared in a markedly epidemic form at Haswell and with more fatal effects, as during that time the weather was unusually severe. The case mortality, previously low, then rose to 3 per cent. The immediate cause of death in every case was broncho-pneumonia. As usual, the favourable or other termination of this disease depends mostly on the weather. Exclusion from school of children not protected by a previous attack and living in infected houses was advised. Entire closure was resorted to only once, a small mixed school, Seaham Parochial, for a week, on the order of the County School Authority. 80 per cent. of the deaths were of children under school age.

SCARLATINA.—During the past five years there has been a slight decline in the incidence of this disease and this year the decline is more favourable. Better still is its declining incidence during the year: 91 in the first quarter, 62 in the second, 34 in the third and 20 in the fourth. In each locality it appeared at nearly the same ratio as in the previous year, except in Murton and the Castle Eden group, where the ratios are quite reversed. Numerous instances presented of the occurrence of single cases, generally from an undiscovered source of infection, or of a small group of cases where, when due precautions for the prevention of its spread were observed, it was apparently stamped out. Unfortunately, especially when its form is mild, these precautions are neglected, and opportunity for contact presents so easily, not only in the school, as is so commonly supposed, but in the houses and the street, that when it once obtains a footing in a populous locality it only disappears when it has expended its energy on virgin soil. The same experience obtains in an epidemic of measles, but in this disease the course runs much more slowly.

I have every reason to believe from daily observation that a more intelligent grasp of the methods of prevention, and consequently their practice, is manifesting itself among the people and that this decrease may be the result. Printed instructions are sent to the head of every household where it occurs and these, no doubt, are becoming more frequently studied. Its incidence varied on the different localities from 0·33 per thousand of population at Seaham to 6·55 at Wingate. The case mortality, formerly high, was in 1905 *nil*. Since then, during the five years 1906 to 1910, it has been respectively 3·1, 2·6, 1·07, 1·24 and 1·93 per cent. No case was found in connection with milk or other food supply. Letters of warning were sent to parents who had permitted their children to mix with others before they were free from infection. A parent who had entered the district from outside, after being warned not to, was prosecuted by that Authority and a fine was imposed.

WHOOPING-COUGH.—This, though not appearing as a distinct epidemic, has been prevalent in the district during the whole of the year. Its greatest incidence was on Hutton Henry during the third quarter. It was mostly limited to young children. Of the 23 deaths from this, all but one were of children under school age and were mostly due to pulmonary sequelæ.

DIPHTHERIA.—The incidence of this disease on the district shews a gratifying reduction. It is the lowest since the district and county may be said to have been invaded by it in 1902. It appeared in every month except June. The numbers in the four quarters were 18, 8, 14 and 24 respectively. As usual, it obtained most at seasons when common colds predominate and the vitality and resisting power of the body are lowered. There was great inequality of the incidence on localities. Only one

was exempt, and the attack rates on the others varied from 0·27 to 2·97, while the case mortalities ranged from 20 to 66 per cent. The case mortality for the whole district was the highest on record. By the courtesy of the medical men in attendance, I personally examined all the cases but a few, and found that nearly one half might be looked upon as very mild, probably due to the more frequent and early use of antitoxin. In the fatal cases more virulence was displayed than usual. 39 per cent. of the deaths occurred early on the first or second day of attendance. The highest mortality coincided with the lowest incidence generally. The reason of this is that in very severe and fatal cases the instructions given for preventing infection to others are more carefully followed than in mild cases where no fear of danger is aroused in the minds of the patient's friends. Tracheotomy was performed only once, in a fatal case. The following table shews the number of cases, attack rate per thousand of population and case mortality per cent., with former years for comparison:—

Year	No. of Cases			Rate	Mortality	
1900	...	13	...	0·32	...	23·07
1901	...	14	...	0·34	...	14·28
1902	...	77	...	1·75	...	20·77
1903	...	92	...	2·08	...	19·56
1904	...	62	...	1·36	...	17·74
1905	...	98	...	2·07	...	18·36
1906	...	85	...	1·72	...	14·12
1907	...	111	...	2·12	...	18·01
1908	...	70	...	1·28	...	11·42
1909	...	107	...	1·88	...	18·69
1910	...	64	...	1·09	...	31·25

The sixty-four cases occurred in sixty-three houses. In only one instance was another person infected in the same house and, as in fifty-seven of the houses there were other children, this indicates

clearly how preventive measures have been understood and followed up, even when due allowance for error of diagnosis is made. Many cases were sporadic and led to no others. One only was apparently infected from outside the district. There was more evidence of infection directly by personal contact. Exactly half (thirty-two) occurred at school age, five to fifteen years, and 35 per cent. were in children under school age. Enquiry led to no instance in which two children in the same class or having an opportunity of mixing at school suffered. All the children attending school from an infected house are excluded. It seems very evident that infection by direct contact takes place in the house or in the street when used as a playground. No connection could be traced to milk supply. In 68 per cent. of the infected houses was fresh milk used for cooking purposes, and in only 20 per cent. had the patient drank raw milk. The others used tinned milk or none. Housing conditions were noted with more value. As to domestic cleanliness, 23 per cent. may be described as very dirty. Defects relating to structure, dampness and insanitary conditions calling for remedy were found in 40 per cent. In regard to overcrowding, 13 per cent. occurred in better-class houses, an undue proportion, and the remaining 87 per cent. in workmen's houses of two, three or four rooms, with an average of 1·86 persons to each room. Three were at farms where milk cows were kept, but no milk had been supplied to any of the infected houses, and ample means afforded for complete isolation. One only was connected with food supply, a small shop, and promptly removed to the Infectious Hospital.

The cases in the different localities were:—
 Easington, eight (attack rate 2·97, mortality 25):
 one in a good house, with no history; one in a dirty
 house with numerous defects; one in a dirty house,

imported; two in a new house where the scavenging was neglected; one in a good house with defective conveniences and an offensive nuisance adjoining; one in the Workhouse, probably got in the village; one in a good house with offensive conditions in adjoining yard. Haswell, five (attack rate 0·75, mortality 20): one in each of two good, clean houses, with no history; one in a clean house, defective as to drainage; one in a house both dirty and damp; one in a house, damp and defective. Shotton, twelve (attack rate 1·05, mortality 25): one in each of three houses, not connected and no history, two of them very dirty and neglected; one in a house where there was scarlatina; one in a good house with blocked sink at the door; one in a house, dirty and damp; after this the other six followed, in some clearly by direct contact and associated with blocked sinks and minor defects. Castle Eden group, three (attack rate 0·27, mortality 66): one at a farm in a woman after parturition and dying from pneumonia, doubtful; one in a house, damp and with no drainage; one in a new house with a defective drain opening close to the door. Murton, fifteen (attack rate 1·19, mortality 33): the first appeared in a dirty house where there had been scarlatina; four cases in separate houses in the same cluster, all clean, closely followed, evidently by contact; the next was separate and had no history; in three of the cluster of houses mentioned, four months later it again appeared, where an offensive ashpit was complained of and one house was much overcrowded; some scarlatina appeared at the same place and was introduced to a group of houses in the furthest part of the village, and a case of diphtheria appeared in each of five houses there; the last case was in a good, new house and was quite unconnected with any of the others. Thornley and Kelloe, none. Wingate, twelve (attack rate 1·19, mortality 33): one isolated case in good surroundings and with no history; one in a clean house with

defective out-offices; three in new houses of a most satisfactory type, with no trace of any history of their origin; seven were in houses of an older class, except one, damp, no defect calling for remedy was noted, they were in one group and infection by contact may have occurred, though in no case could it be traced. Hutton Henry group, four (attack rate 0·64, mortality 50): one in a dirty, damp, dilapidated house; one in a good but dirty house, a child who had been found drinking water from an open channel; one at a farm, with history of mixing with other children suffering from slight sore throat; one in a dirty house with a blocked sink. Seaham, five (attack rate 0·80, mortality 40): one in each of two good houses, with no history; one in each of three new and very satisfactory houses, in two of which there was clear evidence of infection from imported town manure.

ENTERIC FEVER.—The incidence of this disease on the district is the lowest on record, except the very cold summer of 1907. Excluding a specific circumscribed outbreak in March, it made its appearance, as usual, evenly throughout the year, with the seasonal autumnal exacerbation. No locality was exempt. The incidence rates per thousand of population ranged from 0·16 to 2·23, and the case mortality varied from *nil* to 66 per cent. Combined with continued fever the incidence was 0·71 and the case mortality 16·6. The thirty-three cases occurred in as many households. One group of five cases were associated with milk supply. Except in these, no case had been associated with any other giving evidence of infection by carrier or otherwise, and milk had been used as an article of diet in only one case. Three cases were clearly traced to eating mussels. In each case they were got away from the home and the source whence they were obtained could not be ascertained. In no instance was the water supply open

to the slightest suspicion. No case was found to be imported and the remaining twenty-five were truly sporadic. Insanitary surroundings were discovered in 36 per cent. The domestic conditions were very dirty in 24 per cent. Typical diarrhœa was present in 42 per cent. Agreeably to the suggestion of Dr. Wheaton in his report to the Local Government Board on enteric fever, I add Table VI., which gives the age and sex incidence, the occupations of the persons attacked and the number treated in hospital. The following table shews the number of cases, the attack rate per thousand of population and the case mortality per cent. in the district since the adoption of the Notification Act.

Year	No. of Cases		Rate		Mortality	
1893	...	332	...	8·07	...	12·65
1894	...	101	...	2·38	...	23·76
1895	...	87	...	2·01	...	19·54
1896	...	54	...	1·26	...	14·81
1897	...	34	...	0·89	...	20·58
1898	...	74	...	1·89	...	29·72
1899	...	33	...	0·83	...	18·18
1900	...	69	...	1·74	...	4·34
1901	...	115	...	2·80	...	12·17
1902	...	47	...	1·07	...	12·76
1903	...	35	...	0·79	...	17·13
1904	...	38	...	0·83	...	26·31
1905	...	45	...	0·94	...	35·55
1906	...	50	...	1·01	...	24·00
1907	...	23	...	0·44	...	17·38
1908	...	90	...	1·64	...	18·88
1909	...	89	...	1·56	...	16·85
1910	...	33	...	0·56	...	21·21

Their occurrence and distribution in the district were:—Easington, six (rate 2·23, mortality *nil*): two cases occurred on the same day. At one of the houses the drainage was defective, the other was quite satisfactory. Both had milk from the same farm, the cows at which were supplied with

surface water in the meadow. The sale of milk was stopped at the farm and the milk bacteriologically examined. No typhoid bacillus was found, only bacillus coli and bacillus enteritidis sporogeses, both in small amount. But a case then occurred in the family at the farm, and it was found a member from each of the two infected houses had been attending at the farm and nursing. Here was clear evidence of a means of conveying the infection. A case then occurred in each of two other houses, and a mild case of simple continued fever, all of whom had got milk from the farm before the case appeared there. No evidence of infection could be obtained in these cases beyond, possibly, the vessels used. The case at the farm was removed to hospital, and the sale of milk was not resumed until after disinfection and the remedy of some defective conditions. The previous water supply to the cows was discontinued and a supply from a water company's mains, free from suspicion, used exclusively for all purposes. The last case in this township, six months later, in a dirty house with a blocked sink and overcrowded with lodgers, had no connection with the others. Haswell, six (rate 0·90, mortality 16): two clearly traced to a feast of mussels; four in separate houses, with no history of connection, one previously debilitated and two with sanitary defects. Shotton, six (rate 0·52, mortality 16): all in the Horden ward in satisfactory houses and surroundings; three of them dirty, no specific history except one previously delicate; one mild; and one house with a blocked drain. Castle Eden group, one (rate 0·25, mortality *nil*): at Cold Hesleden, good house and surroundings, with a history of a surfeit of mussels when away from home nearly three weeks before. Murton, four (rate 0·52, mortality 50): one, a child with a history of frequently playing in a midden refuse heap; one in a house, dirty and damp; one in a house, clean but very damp; and one in a clean house, with no history. Thornley and Kelloe, three

(rate 0·76, mortality 66): one in a good house, previously delicate and died of meningitis; one in a house with good surroundings except an occasionally blocked sink; one in a poor house with insanitary surroundings. Wingate, five (rate 0·48, mortality *nil*): four in the latest and best houses, with no history or connection, three of them mild; one in a dirty house with possible source of infection. Hutton Henry, one (rate 0·16, mortality *nil*): in a dirty house, blocked drain and insanitary surroundings. Seaham, one (rate 0·16, mortality *nil*): a child, beside where an old privy ashpit had been removed and the ground disturbed.

CONTINUED FEVER.—These were all mild, of short duration, and occurred during cold weather. Two were adults, the rest young children and, except one mentioned under Easington, none displayed any suspicion of connection with enteric fever.

DIARRHŒA.—There was a marked decrease in this. The deaths were 2·25 per cent. of total deaths, against 5·37, the average for the preceding twenty-seven years, and including enteritis the percentage of total deaths was 5·17. 98 per cent., or all but one, were of children under five years of age.

PUERPERAL FEVER.—The proportion of cases to births was 0·09 per cent., against 0·30, the average for the previous seventeen years, and the mortality was *nil*—both figures the lowest on record. Both cases were attended to by registered practitioners. One in satisfactory surroundings, the other in a dirty, poverty-stricken house and premature.

TUBERCULOSIS.—The deaths from pulmonary phthisis were 0·66 per thousand of population, from other tubercular diseases, 0·85, and from all other respiratory diseases, 2·24, all practically the same as

last year. Notification under the "Public Health (Tuberculosis) Regulation, 1908," has been in operation. Nine notifications were made affecting seven cases. All were visited by your Medical Officer and enquired into. Printed instructions and pocket spittoons are supplied, and on removal or death of a case or other cases not so notified the rooms are disinfected. The Council continue to make an annual contribution to a Sanatorium in the county to which several persons, not all in receipt of poor relief, have been sent, with much benefit to the sufferers.

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.—The surface of the district is undulating from the coast line at sea level to nearly 500 feet. The soil is generally boulder clay, with sometimes beds of sand and gravel. The whole is underlain by the magnesian limestone, which in a few places crops out at the surface. Of the nine divisions, number one, Easington, where a new colliery is being begun, and number four, except Cold Hesleden, are agricultural. In the other divisions, with the exception of a few farms, practically the whole population is employed in coal mining and is located in villages beside the collieries. The climate is dry and cold.

HOUSE ACCOMMODATION.—The population is essentially working class, engaged in coal mining to over 90 per cent. This industry is at present undergoing development and increasing the demand for houses. Houses are mostly provided by the mining companies, but private persons also supply a considerable portion. The older houses, built of limestone, require frequently to be wholly rebuilt, and with suitable repairs only can be kept up to present-day requirements. This work is going on gradually, but still needs vigilant pushing by your Council. The greater part of the houses now in use

are constructed of brick, though concrete blocks, as a building material, are now being introduced with success.

The Bye-laws for Streets and Buildings ensure a degree of comfort and convenience much in advance of the past. All plans of new houses, with block plans of new streets, are submitted to your Council, and all sanitary requirements, including drainage, are considered before they are passed. After erection they are inspected by your Surveyor and certified as fit for habitation before they are occupied.

Subject to these regulations, plans have been passed for 484 dwelling houses and other buildings, and certificates of fitness have been issued by your Surveyor. On table VII. will be found classified details of the kinds passed during the year and the localities where they are built. The colliery "workmen's ordinary" consist mostly of three and four rooms, the better houses of four and five rooms. All are of a good type with satisfactory sanitary surroundings. What they require is to be kept in good order—that depends largely on the occupier.

SEWERAGE AND DRAINAGE.—The drainage of the older properties was wholly by open channels. In recent years close drains to all new houses is the invariable practice, and where a drainage system has been introduced to a defined area close drainage has been added to the older houses to take the place of existing open channels. For the disposal of the sewage in some of these areas bacterial filters are in use. The system for Thornley and Wheatley Hill, owing to increase in the size of these villages, was found to be insufficient. This was met by an extension of the works, which has been completed to the satisfaction of the Local Government Board, and they are now quite adequate. At the Shotton filter disposal works a nuisance has been caused

by the sludge, and to abate this the Surveyor is arranging to treat the sludge on the adjoining land, to be acquired for that purpose, with every prospect of completely abating the nuisance. To avoid recurrence of these troubles, your Council have decided, when practicable, to dispose of sewage by a main outfall to the sea. A scheme of this kind has been prepared by your Surveyor for Easington and Thorpe, the sewage disposal of which is at present by settling tanks and thence into Thorpe Burn. To this new scheme is to be joined the sewerage from Easington Colliery village, which is rapidly developing, and to make the scheme complete for the future it is designed to take the sewage of a population of 12,000. After a Local Government Board enquiry in September, their sanction has been obtained and the works are now in progress. On the same date a Local Government Board enquiry was held upon a main outfall scheme, also prepared by your Surveyor, to convey the sewage of Horden Colliery village, already sewered, from the termination of that system direct to the sea. The future population provided for is over 8,000. Permission has been received and the work is now proceeding. The consents of the Board of Trade Harbour Department and the Commissioners of Woods and Forests have also been obtained for both schemes.

Your Council have decided on a scheme, direct to the sea, to include Haswell, South Hetton, Murton, Cold Hesleden, Dalton-le-Dale and part of New Seaham. Tidal observations had to be taken at the proposed outfall, and as these were interrupted during the bad weather of the previous winter the preparation of the scheme was delayed. The work of preparing plans and sections is now in progress, and as this scheme extends over eight miles the work involved in these details, requiring time and care, is very considerable. The

Council have approved a scheme to dispose of the drainage from a new street of houses in Seaton and an adjoining new street in Seaham, at a lower level than the main sewer from Seaham Colliery to the sea. At the lowest point of the system draining these streets the sewage is to be pumped up to the Seaham Colliery main sewer. This is in agreement with an undertaking given by your Council a year ago. The works will be put in hand immediately.

A joint preliminary report by your Medical Officer of Health and Surveyor recommending close drains to a part of the village of Wingate, drained by open channels, was objected to by the Local Government Board in their letter of 17th October, 1910, on the grounds of not being sufficiently comprehensive. Your Council already had in contemplation a scheme of drainage from Wingate and the adjoining parts of Castle Eden and Hutton Henry. Your Surveyor had adumbrated this scheme along with the joint report, and, on his advice, this local drainage was postponed until he had time, after disposing of other big schemes on hand, to undertake this matter thoroughly, along with the village of Castle Eden Colliery in the same route to the sea. Your Council have, therefore, decided to allow the close draining of Wingate to remain in the meantime in abeyance. Comprehensive drainage schemes for naturally defined areas of the district, which will at the same time deal with the question of river pollution, are certainly more desirable than patch-work drainages, which often involve a waste of money by having to be done over again.

Besides maintaining in efficiency existing sewage works, tanks, filters and drains, and cleaning out Hesleden, Wingate and South Hetton becks, sewers have been constructed by your Surveyor's staff: 6" 100 yards, 9" 1,726 yards, 10" 193 yards,

12" 636 yards, 15" 353 yards, 18" 1,094 yards, 21" 561 yards, total 4,663 yards, at the following places :—

Easington Colliery.—240 yards 18" sewers to collect from the drains of the new houses erected by the Colliery Company. For new property in Seaside Lane 353 yards 15" sewers, 590 yards 18" sewers and 561 yards 21" sewers. In the village 100 yards 6" sewers in place of an old one to drain the houses in Back Lane. All these sewers deliver into the new Easington scheme just begun.

Haswell.—South Hetton, 360 yards 9" sewers to displace open channels in Morley Street, Silverdale Street, Bradyll Street and Thomas Street. Trapped sinks are being constructed at these houses which connect to the sewer by branch drains.

Castle Eden.—400 yards 9" sewers to drain the houses at the Factory and enter the bacterial filters for the village.

Murton.—280 yards 9" sewers to replace the open channels in Princess Street. The back-to-back houses now being converted into through houses will have trapped sinks connecting to sewer by branch drains. These are now connected with the present bacterial system, and afterwards will be connected also with the outfall to the sea system.

Wingate.—Wheatley Hill, 200 yards 9" sewers for new houses at the high part of the village and 133 yards 9" sewers to improve the drainage at the north end of Quarry Street. Both enter the bacterial filter system now enlarged. Further improvements at the Gore Beck, converting it into a culvert, have been completed. Trimdon, 353 yards 9" sewers and 266 yards 12" sewers, with flushing chamber, partly replacing old sewers to improve connection with existing property, and entering bacterial system in operation there.

Hutton Henry.—370 yards 12" sewers to replace sewers for the whole of Milbank Terrace preparatory to the street being made. South Wingate, 193 yards 10" sewers, to replace one defective, entering settling tanks there.

Monk Hesleden.—264 yards 18" sewers to catch drainage of new houses at Blackhalls Colliery, laid by that Company, to convey it direct to the sea.

Along the courses of these sewers, at junctions and at whatever points they may be required, inspection chambers with manholes are constructed and ventilation shafts at the highest points.

PRIVATE STREET WORKS ACT.—North Back Hartlepool Street, Thornley, and Back Church Street, Wheatley Hill, have been completed and apportioned. Rodwell Street and approach road to Infant Schools, Trimdon, are practically completed. Plans have been prepared and the contracts let for Vane Street, Acclom Street, Garden Street in part, Back Milbank Terrace and Back Front Street, Station Town, and for Back Lane and Chapel Lane, Easington.

URINALS.—A cast iron urinal has been erected at Trimdon with proper drainage and flush. A brick one is now in course of construction at Murton, and arrangements have been made for further urinals at Wingate and Shotton.

WATER SUPPLY.—For the district generally, this is good both as to quantity and quality. The Council's mains and water pants have been frequently inspected and kept in order. For Hutton Henry and South Wingate a second storage tank, with a capacity of 6,000 gallons, has been erected at Rodridge. This will provide a storage capacity of 12,000 gallons, which improvement, in conjunction with the extra fifteen feet of head due to the stand

pipe at Wingate reservoir, should ensure a satisfactory supply. A temporary shortage in December was caused by a leaking main, which was repaired as soon as discovered. The distribution in Luke Street, Trimdon, by street taps, is insufficient, and the erection of additional taps by the company is promised. Ten samples have been analysed and found unfit for use. They were from shallow surface wells and supplied a group of scattered farms, including two registered for cowkeeping, between Easington and South Hetton. These wells were ordered not to be used. In their place, a joint scheme is under consideration for a supply from a permanent source. A dairy farm at Haswell, formerly using water from a shallow well, has had a satisfactory supply laid on from a permanent source half a mile distant.

INSANITARY PROPERTY.—This is kept under observation both by systematic house-to-house inspection and specially when occasion requires. Batches of such property are reported to your Council at each meeting, and dealt with. The owners are invariably afforded an opportunity of making the necessary improvements or repairs on notice by your officers, and when that is declined, statutory notices are served under the Housing and Town Planning etc. Act. For this purpose, forty-nine statutory notices have been served for 328 houses at the following places, with the results there noted:—

Easington.—Three notices for five houses: one for defects in out-offices and drainage—repaired; one for general dilapidation—closing order issued; three, general dilapidation—promised to rebuild, tenants now being turned out.

Haswell.—Six notices for seven houses: four with low attics and general defects—raised and repaired; one for want of repair—improved; two,

general disrepair—closing orders issued. One house, for which a statutory order had been served the year before, was closed under the Housing of the Working Classes Act by magistrates' order.

South Hetton.—Ten notices for one lot of 149 houses, the chief defect of which was a low attic. The owners offered improvements and repair of the other defects, and on twelve of them this was carried out. Your Council, however, insisted that the attics be raised, and notices were served on four as a beginning. An appeal was lodged with the Local Government Board by the owners. Since then, eight of the houses have been raised and altered to the satisfaction of your Council, and promises have been received from the owners of a fourth of the houses that they will similarly comply. These will be done in lots at a time and it is anticipated the rest will follow. Following notices for two other houses, one has been improved and the other is receiving attention.

Shotton.—One notice for seven houses for general dilapidation—closing orders issued.

Castle Eden.—Six houses with low attics have been wholly rebuilt, by request, without notices being served.

Murton.—For one lot of 137 houses difficulty was experienced in serving notices (as they belonged to an estate in trust) for the provision of ash-closets and remedy of defects. These have now been served and a definite undertaking received that the required improvements will be made forthwith. Three notices for seventeen houses in a state of general disrepair have been followed by closing orders and notices to the tenants to quit, which have been carried out. One notice for two new houses, damp from a defective drain—remedied. In Princess Street there are 116 back-to-back

houses of two rooms each. These the owner, after a conference and without notice being served, agreed to convert into through houses. Your Council wished them to be made two houses into one of four rooms, but the owner declined. The work of conversion into through houses is going on in lots at a time, but they are still two-roomed.

Thornley.—Two notices for two houses, generally insanitary from structural defects, have been promised to be rebuilt. Forty-three old houses, mostly by arrangement and without serving notices, were wholly rebuilt, including required improvements to out-offices.

Wingate.—Six old houses with low attics and defective conveniences have been rebuilt, and one house with defective convenience and in bad repair is being satisfactorily improved by agreement with the owner without serving a notice.

Hutton Henry.—One notice for a house out of repair and with defective convenience—put into habitable order.

Under the Public Health Act, fifty-one statutory notices for, besides other premises, 136 dwellings were served, with results as follow, including notices previously served or promises made:—

Easington.—Two notices for four houses, drains not connected with sewer—work carried out. One for insufficient privy accommodation to a house and shop—remedied; one for defective drainage and water supply—both supplied.

Haswell.—One lot of 160 houses was the subject of much correspondence. Some were closed by the owner voluntarily. Your Council decided to serve statutory notices, but these were withheld when the owner (who has only a life

interest) entered into negotiations with the County Council. The matter, for the present, is left in the hands of that Authority.

South Hetton.—Twenty-five notices for forty-nine houses for general defects, damp, unceiled attics, defective paving and drainage, and to replace privy ashpits by ash-closets. The necessary work is being carried out.

Horden.—One for contravention of building bye-laws—complied with.

Castle Eden.—One for factory waste entering sewage stream and causing a nuisance—being abated by constructing a new sewer.

Burdon.—To provide drainage for four houses.

Cold Hesleden.—Notices to supply efficient convenience to fifty-two houses—carried out, and paving to thirty-three houses promised.

Murton.—Six notices for overcrowding—abated; one for a pool of stagnant water in a village green—nothing done yet; four for six houses with insufficient privy accommodation—receiving attention; one for accumulation of stable manure near to dwellings—abated. Four two-roomed back-to-back houses have been converted into two four-roomed houses.

Thornley.—One notice for a lot of forty houses, to provide small ash-closets in place of defective privy ashpits—not yet expired.

Kelloe.—Ten houses have been improved by general repairs, ceiling the upper rooms and introducing a staircase in place of a step-ladder.

Wingate.—One notice for four houses, to convert privy ashpits into ash-closets and pave yards—receiving attention.

Hesleden.—One for nuisance from cesspool attached to eight houses—abated by covering in cesspool and extending drains.

There are thirty-four wooden huts in the district built for temporary use and partly occupied. The Sanitary Inspectors have specially reported upon them and your Council have requested that they be demolished.

Conversion of ashpit privies into ash-closets during the year, 585. At Haswell, 11; South Hetton, 88; Cold Hesleden, 28; Murton, 66; Thornley, 10; Kelloe, 12; Wingate, including Trimdon, 27; Hutton Henry, 18; Monk Hesleden, 119; Seaham, 206.

HOUSING AND TOWN PLANNING ETC. ACT, 1909:—The “Inspection of Districts Regulations Order,” September, 1910, was received. In last year’s Report it was mentioned I intended to begin a systematic inspection of the district in a manner similar to that requested by these regulations. The note books and record books were in use by your officers when this order was issued, and in the covering circular it was mentioned that the form in use need not be abandoned provided that it included all the matters covered by Article II. As the form in use does cover Article II., the inspection is being continued in the same manner as it was begun. The inspections were conducted by your Sanitary Inspectors, whom I accompanied in their first visits throughout the district generally to ensure a uniformity of observation and indication of conditions. The number of representations to the Local Authority, with a view to the making of closing orders, was not large, as there is a considerable amount of similar work in hand taken irregularly out of the order of these inspections. As time permits, in future, these records will present material for improvement in the matter of housing,

without delay occasioned by fresh inspection. It should be noted that numerous defects were found which, though not grave enough to close the dwelling as unfit for habitation, still ought to be remedied. In such cases the owners were notified of these defects without the intermediation of your Council, and in many cases they were willingly remedied. It is understood by owners that an inspection is liable to be followed by a report to the Council, and to avoid this there is a general desire to follow any suggestions as to repairs. It was intended to shew the results in tabular form, but as the work is in its infancy it is hardly sufficient to make a table, and, besides, it is expected a uniform table for a basis will be issued.

I.—The number of dwelling houses inspected under and for the purposes of Section 17 of the Act were:—

Easington	...	...	...	75
Haswell	...	...	...	80
South Hetton	...	...	...	57
Shotton	...	...	...	57
Wingate	...	...	...	90
Hutton Henry	...	...	...	31
Total				390

II.—The number found to be unfit for habitation was thirteen.

III.—Number of representations made to Authority with a view to obtaining closing orders, four.

IV.—Number of closing orders made, none.

V.—The number of dwelling houses the defects in which were remedied without the making of closing orders—many made, more promised. The effect has yet to be ascertained.

VI.—Repaired after making closing orders—none.

VII.—The general character of the defects found to exist were, in the old houses built of limestone, dampness at the base of the walls, in the old houses generally, an attic with a low ceiling, want of paving, some leaking roofs, defective privy middens and general disrepair.

NUISANCES.—Minor defects and nuisances observed by your Inspectors and treated by informal written notices, and, if remedied, as they mostly are, not brought under the notice of your Council. 371 of these were served for the following conditions:—Dwelling Houses, foul condition, 11, structural defects, 44, overcrowding, 5; Lodging Houses, 4; Cowsheds, 11; Slaughter Houses, 7; Ashpits and Privies, 23; Deposits of Refuse and Manure, 21; Defective Yard Paving, 24; House Drainage, defective traps, 28, no disconnection from sewers, 24, other faults, 53; Water Supply, 2; Pigsties, 2; Animals Improperly Kept, 1; other nuisances, 35; notices to scavenging contractors, 76.

EXCREMENT AND REFUSE REMOVAL.—These are removed together, in the older houses by means of the privy ashpit and in the new by the ash-closet. The work is undertaken by the Council and let to contractors. Generally it is performed fairly well, though at Easington the contract has been twice cancelled for persistent neglect. The ash-closets are cleansed twice a week and the ashpits once a fortnight. Where there is a case of enteric fever the cleansing is done every day. The ashpits are steadily growing fewer and, it is to be hoped, will soon wholly disappear. Many are not yet educated to the advantages of a receptacle of limited space, and difficulty is experienced by the promiscuous deposition of refuse too bulky for the small ash-closet. Where a village is completely sewered this

is notably the case in blocked sinks and drains, particularly at Horden. Bills are posted from time to time requesting tenants to exercise more care in these matters. In these colliery village communities, for the extinction of typhoid and diarrhœal diseases, no measure is so essential as efficient scavenging. This requires frequency and thoroughness. A few prosecutions of careless tenants would have a beneficial effect.

LODGING HOUSES.—There are two of these, both at Easington: one, new, in good condition, containing thirty-two beds, and well managed; the other is small and in a poor condition. Both are regularly inspected and no case of infectious disease has been found in them.

SLAUGHTER HOUSES.—These are inspected for ordinary nuisances. Seven informal notices have been served, all with regard to cleanliness. No case of infectious disease has occurred in the dwelling houses connected with any of them. Your Council have decided, after correspondence with the Local Government Board, to accept their bye-laws *en bloc*, and are now awaiting their confirmation.

COWSHEDS, DAIRIES AND MILKSHOPS.—There are fifty-one of these now on the register, three of which have been added during the year. The model bye-laws have been in force during the year. All have been visited, and eleven informal notices served. Structural alterations have been made to three cowsheds. Three statutory notices have been served for defects as to floor, roof, space and ventilation. Structural alterations have been made to three dwellings, and water supply from a public company has been laid on to two. Infectious diseases were found in connection with three: two diphtheria, in one the cows were temporarily removed, and in

both there was efficient isolation of the patient and attendants; in one, enteric fever, the sale of milk was stopped, patient removed and alterations made, including a fresh water supply. Precautions were taken and no further spread occurred. Besides the bye-laws, printed instructions are given to cow-keepers and milk retailers as to the means to be adopted for ensuring clean milk and avoiding contamination.

HOSPITALS, INFECTIOUS DISEASES AND PREVENTION.—The notification of all the more important infectious diseases, including every case of diphtheria and enteric fever, is followed by a special enquiry by your Medical Officer to ascertain the circumstances of its occurrence and to take such steps as may be deemed advisable. Printed instructions of guidance are sent to each house where an infectious case is notified, disinfectants are supplied, premises disinfected when practicable, and infected articles destroyed when necessary and compensation made. Medical men are supplied with diphtheria antitoxin for those unable to pay for it. This has been in practise for some years. Scabies, though not infectious, is disagreeably contagious, and has been so prevalent in some places as to call for a special circular from the County Medical Officer of Health, and where necessary, disinfectants were supplied by your Authority. In the matter of preventing the spreading of disease by attendance at school, in March, I attended a conference, in the Shire Hall, Durham, of the Medical Officers of Health of the county, to determine as to a uniform action in regard to school closure and exclusion. Notices of exclusion have been sent by head teachers and attendance officers.

The Isolation Hospital with twenty beds and cot in four wards has been maintained with a permanent staff. Twenty-six cases were admitted for treatment:

eleven, enteric fever; eight, diphtheria; seven, scarlet fever. I recommended the addition of a fixed, high-pressure steam disinfecter in the hospital grounds to serve both for that institution and the outside district. This is under consideration by a special committee, and estimates are being obtained for the work, but the matter is not yet finally decided upon.

The Joint Small-pox Hospital for this and Sedgefield Rural Districts has been kept in readiness by caretakers, but no case has occurred during the year. While 2,132 births have been registered, 461 objections to vaccination have been received, or 21 per cent. This is an indication that the foundations are being laid for an extensive use of this institution whenever the disease is introduced into the district, which must, in the natural order of things, be sometime, probably soon.

Sub-Committees have been appointed to specially consider the report of Dr. R. W. Johnstone (who inspected the district in 1909), in regard to slaughter houses, the duties of the Sanitary Inspectors, the adoption of parts of the "Public Health Acts (Amendment) Act, 1907", special lots of insanitary property, drainage schemes and other matters.

Three Local Government Board enquiries for drainage schemes have been held during the year.

PUBLIC HEALTH ACTS (AMENDMENT) ACT, 1907.—Your Council, after exhaustive deliberation, have adopted Parts II., III., IV. and V. of this Act, with the exception of Sections 19, 21, 39, 40, 41, 42 and 47, and subject to certain restrictions, which exceptions and restrictions were stipulated by the Local Government Board. The adoption of this Act will give your Council very much wider powers than they previously possessed.

OFFENSIVE TRADES.—The adoption of certain sections of the Public Health Acts dealing with this matter is now under your consideration.

The year's statistics shew that the death rate continues the lowest on record, and has done for four years successively. The infant death rate shews the same decrease, for the legitimate it is 151, for the illegitimate, 288. The rate of this last is 1·12 per thousand—higher than the previous year. It was highest in Hutton Henry and lowest in the Castle Eden group. The general birth rate is lowest in the agricultural group, Castle Eden, 26, highest in the mining part, Thornley, 43.

The requirements of the district are: 1.—More thorough scavenging—the ashpits should be cleansed once a week. 2.—Continued conversion of midden privies into ash-closets, with bi-weekly cleansing. 3.—Open channels replaced by close drains, and more care of blocked sinks. 4.—Complete sewage systems to villages direct to the sea to avoid river pollution. 5.—Extension of deep well water supplies wherever shallow wells are used. 6.—Repair of all old workmen's dwellings, including raising of low attics. 7.—Extension of Street Works Act, including a modified measure for back streets. 8.—A high-pressure steam disinfecter.

It should not be forgotten what must be placed to the credit of your Council's labours as indicated by: 1.—The steadily lowering death rate. 2.—The lessened amount of infectious disease. 3.—The lowering infantile death rate. 4.—The general bettering of surroundings by sanitary accommodation and scavenging. 5.—The steady improvement in the condition of old property. 6.—Quantity and superior class of new property. 7.—Unprecedented amount of new work in drainage, streeting and general sanitary conditions. 8.—An additional

Sanitary Inspector has been employed during the year.

The following table shews the chief vital statistics of the district for 1910 compared with those for the administrative county per thousand of population. It may be noted that the natural increase by the difference between the birth and death rates is in the district 9·3 per cent. higher than that of the county.

				Easington	Adminis- trative County
Birth rate	...	...	...	36·2	34·4
Death rate	...	...	...	15·1	15·1
Zymotic	...	...	...	1·14	1·62
Infant mortality rate (per 1,000 births)	...	...	...	153	126
Small-pox	...	...	...	<i>Nil</i>	<i>Nil</i>
Scarlet fever	...	...	...	0·06	0·08
Diphtheria and membranous croup	...	...	...	0·35	0·17
Fever (enteric and continued)	...	...	...	0·11	0·09
Measles ...	...	...	...	0·17	0·20
Whooping-cough	...	...	...	0·39	0·25
Diarrhœa	...	...	...	0·78	0·81
Phthisis...	...	...	...	0·66	0·88
Other tubercular diseases	...	...	...	0·88	0·65
Acute respiratory diseases	...	...	...	2·22	2·42

FACTORY AND WORKSHOPS ACT, 1901.

Every factory, workshop, workplace and bakery on the register has been visited by your Sanitary Inspectors at least once during the year. Most attention is paid to places where females and young persons are employed. A few names have been removed from the register and others added. The total number remains the same as before.

FACTORIES.—These have all been kept in fair order. No defect has been noted calling for notice of abatement.

WORKSHOPS AND WORKPLACES.—No insanitary condition requiring a written notice has been observed. Twenty-five verbal notices were given: twenty-one for want of cleanliness, and four for lack of ventilation. In one establishment, where persons of both sexes are employed and there are two water-closets, notice was served to label the doors male and female according as they were respectively used, and was complied with. An infectious disease was found in a tailor in a workshop and a dressmaker working in her own house. The tailor was removed to the Infectious Hospital and instructions were given to the dressmaker as to precautions to be observed before resuming work.

BAKERIES.—These are the same as before and satisfactorily conducted.

HOMEWORK.—There is still no work under this definition carried on in the district.

The list in the register is now as follows :

FACTORIES—

Brickmaking	...	...	...	...	6
Brewery and ærated waters	...	...	...	...	2
Electricity generating	...	...	...	...	3
Cartwright	...	...	...	...	1
Limestone quarry	...	...	...	...	1
					— 13

WORKSHOPS—

Joiners and Cartwrights	...	...	...	...	12
Blacksmiths	...	...	...	...	13
Tailors	...	...	...	...	4
Dressmaking	...	...	...	...	25
Cabinets	...	...	...	...	5
Millinery	...	...	...	...	10
Cobbling	...	...	...	...	9
Watch and clock cleaning	...	...	...	...	3
Saddler	...	...	...	...	1
Coach painting	...	...	...	...	2
Cycle repairing and engineering	...	...	...	...	2
					— 86

WORKPLACES—

Grocery and Drapery	...	...	...	...	4
Drapery and Clothing	...	...	...	...	4
Beer bottling	...	...	...	...	2
Social Clubs	...	...	...	...	3
Grocery	...	...	...	...	7
					— 20

BAKERIES	...	...	...	...	5
					— 5

Total...124

I remain, Gentlemen,

Your obedient Servant,

JAMES ARTHUR,

L.R.C.P.E., L.R.C.S.E., D.P.H.R.C.P.E.,

Medical Officer of Health.

To the Easington Rural District Council.

TABLE I

EASINGTON RURAL DISTRICT

Vital Statistics of whole District during 1910 and previous years

YEAR	Population estimated to Middle of each Year	BIRTHS		TOTAL DEATHS REGISTERED IN THE DISTRICT				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT	Deaths of Non-residents registered in Public Institutions in the District	Deaths of Residents registered in Public Institutions beyond the District	NET DEATHS AT ALL AGES BELONGING TO THE DISTRICT	
		Number	* Rate	Under 1 Year of Age		At all Ages						
				Number	Rate per 1,000 Births registered	Number	* Rate					
1	2	3	4	5	6	7	8	9	10	11	12	* Rate
1900	40,194	1,428	35.52	238	166	739	18.38	35	13	13	739	18.38
1901	40,997	1,656	40.39	312	188	837	20.41	35	9	23	851	20.75
1902	43,761	1,659	37.91	282	169	797	18.21	23	7	24	814	18.60
1903	44,117	1,640	37.17	272	165	794	17.99	22	1	19	812	18.40
1904	45,363	1,687	37.18	291	172	819	18.05	32	9	15	825	18.18
1905	47,160	1,642	34.81	287	174	874	18.53	39	5	22	890	18.87
1906	49,181	1,808	36.76	317	175	913	18.56	36	11	27	929	18.88
1907	52,336	1,809	34.56	295	162	898	17.15	40	5	24	917	17.52
1908	54,614	2,088	38.23	339	162	917	16.77	40	16	14	910	16.66
1909	56,922	1,984	34.85	304	153	902	15.84	29	7	29	917	16.10
Averages for years 1900-1909	47,464	1,739	36.72	294	167	849	17.98	33	8	21	860	18.23
1910	58,777	2,132	36.27	328	153	860	14.63	34	9	38	889	15.12

* Rates in Columns 4, 8 and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7 corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity and have died in public institutions elsewhere.

Area of District in acres
(exclusive of area
covered by water) } 36,940.

Total population at all ages ... 40,997
Number of inhabited houses ... 7,784
Average number of persons per house ... 5.26
At Census of 1901

TABLE II

EASINGTON RURAL DISTRICT

Vital Statistics of separate Localities in 1910 and previous years

NAMES OF LOCALITIES	EASINGTON				HASWELL				SHOTTON				CASTLE EDEN, HAWTHORN, BURDON, COLD HESLEDEN, DALTON-LE-DALE				EAST MURTON				THORNLEY AND KELLOE				WINGATE				MONK HESLEDEN, HUTTON HENRY, SHERATON, HULAM, NESBIT				SEAHAM, SEATON, SLINGLEY			
	1				2				3				4				5				6				7				8				9			
YEAR	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
1900	1,606	57	36	8	5,928	184	101	30	1,773	47	36	9	3,094	83	43	9	5,943	249	105	45	3,978	154	74	18	7,706	321	146	52	4,628	142	100	35	5,538	191	98	32
1901	1,731	47	41	8	5,512	229	87	28	2,324	87	45	13	3,300	111	59	12	6,541	296	133	52	3,989	154	89	34	8,005	347	166	72	4,051	164	106	42	5,544	221	125	51
1902	2,060	59	46	12	5,800	239	127	47	3,040	99	53	20	3,239	121	44	13	6,715	292	130	51	3,784	157	96	35	8,091	334	144	52	5,349	163	70	19	5,683	195	104	33
1903	1,990	46	28	6	6,180	229	100	33	3,708	136	86	32	3,008	101	53	14	6,401	279	119	41	3,908	147	77	26	8,043	342	192	71	5,196	167	83	26	5,683	193	74	23
1904	2,067	67	39	10	6,417	225	128	41	4,234	181	90	33	3,113	93	56	27	6,501	262	120	35	4,034	169	60	24	8,553	324	151	65	5,279	179	86	25	5,165	187	95	31
1905	2,197	62	38	11	6,575	221	117	34	5,170	167	96	34	3,444	89	50	15	6,711	257	149	55	3,997	161	96	28	8,575	310	165	53	5,380	187	76	23	5,111	188	103	34
1906	2,197	58	45	11	6,575	241	132	49	6,775	240	122	43	3,524	118	54	18	6,806	276	115	39	4,092	160	75	22	8,651	335	181	60	5,450	189	106	35	5,111	191	99	38
1907	2,064	62	25	2	6,533	231	131	51	8,263	325	133	52	3,608	96	56	8	7,174	266	131	38	4,671	143	88	33	8,977	310	153	52	5,607	189	95	29	5,439	187	105	28
1908	2,239	69	40	8	6,622	236	117	37	9,967	447	174	89	3,766	112	43	16	7,311	289	105	32	4,160	181	79	35	9,099	347	183	67	5,775	221	94	33	5,675	186	75	22
1909	2,312	66	44	8	6,764	240	99	39	10,598	441	193	77	3,771	93	43	13	7,479	248	114	26	4,139	166	81	33	9,762	336	148	54	6,080	202	93	28	6,017	192	102	26
Averages of Years 1900 to 1909	2,046	59	38	8.4	6,290	227	113	39	5,586	216	103	40	3,386	101	50	14	6,757	272	122	41	4,075	159	81	29	8,546	330	163	59	5,279	180	91	29	5,496	193	98	32
1910	2,689	78	32	7	6,659	219	117	45	11,335	456	172	80	3,881	102	41	9	7,584	249	124	36	4,197	184	76	32	10,062	375	148	56	6,169	247	88	31	6,201	222	91	35

NOTE.—(a) Deaths of residents occurring beyond the district are included in sub-columns *c* of this table, and those of non-residents registered in the district excluded.

(b) Deaths of residents occurring in public institutions are allotted to the respective localities according to addresses of the deceased.

TABLE III

EASINGTON RURAL DISTRICT

Cases of Infectious Disease notified during the year 1910

NOTIFIABLE DISEASE	CASES NOTIFIED IN WHOLE DISTRICT							TOTAL CASES NOTIFIED IN EACH LOCALITY									NUMBER OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY											
	At all Ages	At Ages—Years						Easington H. W. 1	Haswell 2	Shotton 3	Castle Eden, Hawthorn, +Burdon, Cold Hesleden, Dalton-le-Dale 4	East Murton 5	Thornley and Kelloe 6	Wingate S.H. 7	Monk Hesleden, Hutton Henry, Sheraton, Hulam, Nesbit 8	Seaham, Seaton, Slingley 9	Easington 1	Haswell 2	Shotton 3	Castle Eden, Hawthorn, +Burdon, Cold Hesleden, Dalton-le-Dale 4	East Murton 5	Thornley and Kelloe 6	Wingate 7	Monk Hesleden, Hutton Henry, Sheraton, Hulam, Nesbit 8	Seaham, Seaton, Slingley 9	Total Cases removed to Hospital 10		
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards																					
Small-pox ...																												
Cholera ...																												
Diphtheria and membranous croup	64		23	32	4	5		8	5	12	3	15		12	4	5	4		2					2			8	
Erysipelas ...	55		3	7	4	38	3	5	2	22	5	1	5	12	2	1												
Scarlet fever ...	207	2	62	124	15	4		6	22	59	4	24	17	64	9	2	1	1	2		2			1			7	
Typhus fever ...																												
Enteric fever ...	33		1	8	11	13		6	6	6	1	4	3	5	1	1	4	1	3	1		1	1				11	
Relapsing fever ...																												
Continued fever ...	9		2	5		2		2	1		1			1	4													
Puerperal fever ...	2				1	1					1				1													
Plague ...																												
Measles ...																												
Whooping-cough																												
Totals...	370	2	91	176	35	63	3	27	36	99	15	44	25	94	21	9	9	2	7	1	2	1	1	3			26	

H.—Easington District Infectious Hospital. W.—Union Workhouse. S.H.—Easington and Sedgfield Con-joint Small-pox Hospital.

TABLE IV

EASINGTON RURAL DISTRICT

Causes of and ages at Death during year 1910

CAUSES OF DEATH	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES							DEATHS IN OR BELONGING TO LOCALITIES AT ALL AGES								TOTAL DEATHS IN PUBLIC INSTI- TUTIONS IN THE DISTRICT	
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and up- wards	Easington	Haswell	Shotton	Castle Eden, Hawthorn, Burdon, Cold Hesleden, Dalton-le-Dale	East Merton	Thornley and Kelloe	Wingate	Monk Hesleden, Hutton Henry, Sheraton, Hulham, Nesbit		Seaham, Slingley, Seaton
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	10	2	6	2	...	...	...	...	6	1	1	1	...	1	...	...	...
Scarlet fever ...	4	...	2	2	...	...	...	...	...	...	1	1	...	1	...	...	...
Whooping-cough ...	23	11	11	1	...	...	...	...	5	3	...	2	...	5	8	...	...
Diphtheria and membranous croup ...	21	...	13	6	1	1	...	2	1	3	2	4	...	5	2	2	2
Croup ...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Typhus {	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever { Enteric	7	...	...	1	3	3	...	...	1	1	...	3	2	...	...	...	1
Other continued	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic influenza ...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	20	14	6	...	...	...	...	1	...	1	...	...	...	3	2	13	...
Enteritis ...	26	14	11	...	...	1	...	1	4	7	2	2	3	4	3	...	...
Gastritis ...	4	1	2	...	1	...	...	...	...	1	...	...	...	3	...	...	...
Puerperal fever...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
Phthisis ...	39	...	2	6	5	26	...	...	6	3	1	11	2	12	3	1	1
Other tubercular diseases ...	50	17	20	8	1	3	1	2	4	16	2	9	2	6	5	4	...
Cancer, malignant disease ...	34	...	...	...	...	25	9	3	5	2	1	4	2	9	1	7	2
Bronchitis ...	59	29	13	1	2	8	6	...	3	17	3	7	4	13	8	4	1
Pneumonia ...	64	19	22	3	3	14	3	2	10	14	5	9	6	6	7	5	1
Pleurisy ...	1	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...
Other diseases of respiratory organs ...	7	1	...	...	...	6	...	...	...	1	1	...	3	1	1	...	...
Alcoholism Cirrhosis of liver }	3	...	...	...	...	3	...	...	1	...	...	2	...	...	...	...	1
Veneral diseases ...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Premature birth ...	74	74	...	...	...	...	...	...	8	23	1	15	5	8	8	6	...
Diseases and accidents of parturition ...	19	11	...	...	2	6	...	...	2	1	...	3	6	4	1	2	...
Heart diseases ...	45	...	...	...	3	30	12	5	3	5	4	7	4	12	2	3	4
Accidents ...	34	2	...	3	3	22	4	...	1	10	3	3	4	5	7	1	3
Suicides ...	3	...	...	...	...	3	...	...	...	1	...	...	...	...	1	1	...
All other causes ...	334	136	18	8	11	64	97	16	56	59	14	39	33	49	29	39	18
All causes...	889	331	127	42	35	222	132	32	117	172	41	124	76	148	88	91	34

TABLE V

EASINGTON RURAL DISTRICT

INFANTILE MORTALITY DURING THE YEAR 1910

Deaths from stated causes in weeks and months under One Year of age

CAUSE OF DEATH		Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under One Year
All Causes	Certified ...	92	8	23	12	135	29	18	18	23	13	17	18	11	12	14	14	322
	Uncertified...	4	1	1		6		1				2						9
Common Infectious Diseases	Small-pox ...												1	1				2
	Chicken-pox ...																	
	Measles ...																	
	Scarlet fever ...																	
	Diphtheria: croup																	
Diarrhoeal Diseases	Whooping-cough ...												2				1	11
	Diarrhoea, all forms			1				1	2	3	1	1		2	1		2	14
	Enteritis, muco-enteritis, gastro-enteritis				1		1	1	1	2		2	1	1	1	2	1	14
	Gastritis, gastro-intestinal catarrh						1						2			1		4
	Premature birth ...	59	4	9	2	74	12	3	3	6	2	3	3	4	1	4	1	65
Wasting Diseases	Congenital defects	15	1	4	1	21	1	3				1						74
	Injury at birth	8				8												26
	Want of breast-milk: starvation																	8
Tuberculous Diseases	Atrophy, debility, marasmus	8	2	6	7	23	12	3	3	6	2	3	3	4	1	4	1	65
	Tuberculous meningitis ...									1							3	4
	Tuberculous peritonitis: tabes mesenterica		1			1		3	2	1			1		1		2	11
	Other tuberculous diseases													1	1			2
	Erysipelas ...																	
Other Causes	Syphilis ...																	
	Rickets ...																	
	Meningitis (not tuberculous)							1	1	1	2		2		1	1		9
	Convulsions ...	6	1	1		8	1	3	5	3	1	3	1	1	1	1		28
	Bronchitis ...			1		1	7	3	2	1	3	6	2	1	2		1	29
	Laryngitis ...												1					1
	Pneumonia...						1	2		1	2	3	2	2	2	4	2	19
	Suffocation: overlying					2												2
	Other causes ...		1	1	1	3	1				1				2	1		8
		96	9	24	12	141	29	19	18	23	13	19	18	11	12	14	14	331

Births in the year { Legitimate ... 2,066.

Population estimated to middle of 1910 ... 58,777.

Deaths from all causes at all ages... 66.

Deaths in the year of { Legitimate Infants ... 312.

Deaths from all causes at all ages... 885.

Deaths in the year of { Illegitimate Infants ... 19.

TABLE VI

EASINGTON RURAL DISTRICT

Rates of Enteric Fever attack per 1,000 of population of each sex at different age periods and occupations, during the year 1910.

			At all Ages	Under 5 Years	5-10	10-15	15-25	25-40	40-60	60 and up- wards
Males	...	...	·408	·017	·068	·034	·085	·102	·102	
Females	...	...	·154		·034		·102	·017		
At School	...	...	...	1	6	2				
Housewife or Domestic		...					4	1		
Farm Work	...	...	...					1		
Mining	...	...	...				5	2	5	
Milliner	...	...	...				1			
Barber	...	...	...					1		
Engineman	...	...	...					1		
Tailor	...	...	...				1			
Quarryman	...	...	...						1	
Treated in Hospital...		...				1	4	3	3	

TABLE VII

EASINGTON RURAL DISTRICT

Plans approved during the year 1910 and Certificates of Habitation issued

VILLAGE	TOWNSHIP	Ordinary Colliery Houses	Better-Class Colliery Houses	Ordinary Private Houses	Better-Class Private Houses	Shops and Houses	Villas	Double Tenement Houses	Churches and Chapels etc.	Hotels, Schools, Theatres	Stables	Farms and Lodging Houses	Totals
Blackhalls ...	Monk Hesleden ...	...	...	6	...	2	...	...	...	1	...	...	9
Castle Eden ...	Castle Eden ...	...	...	9	...	...	...	...	...	...	...	...	9
Castle Eden Colliery...	Monk Hesleden ...	...	...	...	...	...	...	...	...	1	1	...	2
Deaf Hill ...	Wingate ...	...	...	...	...	...	...	...	...	...	...	...	...
Easington ...	Easington and Thorpe	...	...	5	24	...	...	...	...	...	3	1	33
Easington Colliery ...	Easington and Thorpe	56	2	96	21	10	1	1	...	...	...	...	187
Haswell ...	Haswell ...	...	...	...	8	3	...	...	...	...	1	...	12
Horden ...	Shotton ...	...	...	12	...	...	...	...	2	4	...	...	18
Hutton Henry ...	Hutton Henry ...	...	...	...	1	...	...	...	...	...	...	...	1
Murton Colliery ...	Murton, East ...	...	...	...	30	...	1	...	...	...	...	1	32
New Seaham...	New Seaham...	...	...	...	3	1	1	1	...	...	1	1	8
Shotton Colliery ...	Shotton ...	...	...	...	5	2	...	...	...	1	1	1	10
Station Town...	Hutton Henry	...	...	10	...	...	...	...	...	...	...	...	10
South Hetton...	Haswell ...	...	...	...	...	...	...	...	...	...	1	...	1
Trimdon ...	Wingate ...	...	...	4	...	...	...	...	...	...	...	...	4
Thornley ...	Thornley ...	...	...	14	1	...	...	...	...	...	1	...	16
Wheatley Hill ...	Wingate ...	98	...	18	1	4	...	...	...	1	...	...	122
Wingate ...	Wingate ...	...	...	...	6	1	...	...	...	1	...	...	8
Hawthorn ...	Hawthorn ...	...	...	2	...	...	...	...	...	...	...	...	2
Grand Totals	...	154	2	176	100	23	3	2	2	9	9	4	484
Grand Totals of Certificates of Habitation issued. Part Plans approved during previous year ...													
...	...	146	14	95	10	7	4	7	1	-	2	4	290

